

## Case 2956

### *Campeloma* Rafinesque, 1819 (Mollusca, Gastropoda): proposed conservation

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**Abstract.** The purpose of this application is to conserve the name *Campeloma* Rafinesque, 1819 for a genus of Tertiary and Recent freshwater prosobranch gastropods (family VIVIPARIDAE) from the eastern United States. This name has been continually used for over 130 years but is threatened by a senior subjective synonym *Ambloxis* established by Rafinesque one year earlier. *Ambloxis* has been little used, and then mainly in lists; the names of its included species have never been adopted.

**Keywords.** Nomenclature; taxonomy; Gastropoda; VIVIPARIDAE; Tertiary and Recent freshwater prosobranch gastropods; *Campeloma*; *Campeloma crassula*.

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1. Rafinesque (1818a, p. 355) briefly described a new genus *Ambloxis* and included in it two new nominal species *A. eburnea* and *A. ventricosa*. He did not describe or figure these two species and their names are therefore nomina nuda. In another paper the same year he (Rafinesque, 1818b, p. 107) listed *Ambloxis* as a new genus with four species which he did not name. The following year he (Rafinesque, 1819, p. 423) established the genus *Campeloma* and described a single species *C. crassula* Rafinesque, 1819 which is, therefore, the type species of *Campeloma* by monotypy.

2. Gill (1864, p. 152) identified *Ambloxis* as congeneric with *Campeloma* Rafinesque, 1819, but noted that 'the insufficiency of the generic diagnosis as well as the want of connection with any described species will prevent its adoption'. Binney (1865, p. 45) copied figures of *Lymnula ventricosa* (Binney, 1865, pp. 42, 45, fig. 91) and *Lymnea eburnea* (Binney, 1865, pp. 45-46, fig. 92) from Rafinesque's unpublished manuscript *Conchologia Ohiensis*. The names of these two species were placed in the synonymy of *Melantho decisa* (Say, 1817), and Pilsbry (1917, p. 111) designated the nominal species *L. eburnea* as the type species of *Ambloxis* Rafinesque, 1818. Tryon (1865, p. 82) identified *Ambloxis* as the same as the genus *Melantho* Bowditch, 1822 as used by American authors.

3. Walker (1918, pp. 127, 163) rejected the use of *Ambloxis* and used *Campeloma*. Baker (1928, p. 56) noted Pilsbry's suggested priority of *Ambloxis* over *Campeloma* but rejected the generic change as unwarranted, following Walker (1918, pp. 127,

163). Morrison (1947, p. 29) is the only subsequent author to have used *Ambloxis* as a valid genus in place of *Campeloma*. Parodiz (1956, p. 391) questioned Pilsbry's action in recognizing *Ambloxis*. Recently, Burch (1982a, p. 210; 1982b, p. 264) noted that *Ambloxis* Rafinesque, 1818 was an unidentifiable name and 'occasionally mentioned as possibly being the same as *Campeloma* Rafinesque, 1819'. Sherborn (1923, p. 252) and Neave (1939, p. 137) are the only two nomenclators to list *Ambloxis*.

4. The name *Campeloma* has been extensively used since Gill (1864). Meek & Hayden (1865) were the first to use *Campeloma* for fossil species, and numerous fossil species have been referred to *Campeloma* (Meek, 1871a, 1871b, 1876; Meek & Hayden, 1865; Henderson, 1935). Meek (1876) gave a succinct account of the genus and from this date forward the use of the generic name *Campeloma* was essentially unquestioned. Call (1883) reviewed the history of the use of the generic name *Campeloma* and rejected the use of both *Paludina* 'Lamarck' Férussac, 1812 and *Melantho* Bowditch, 1822 for this group of North American species.

5. Pilsbry (1917, p. 113) noted that *Campeloma crassula* Rafinesque, 1819 was the type species of *Campeloma* by original monotypy and placed *Campeloma* Rafinesque, 1819 as a junior synonym of *Ambloxis* Rafinesque, 1818. Pilsbry claimed that *crassula* could not be recognized from its description, but this belief was based on an inadequate reading of Rafinesque's diagnosis. *C. crassula* has been used by various workers, such as Burch & Tottenham (1980, p. 86, figs. 42, 54–55). Thiele (1931, p. 116) tentatively listed *Ambloxis* as a synonym of *Campeloma*. Clench (1962, pp. 273–274) listed *Ambloxis* as a synonym of *Campeloma* but failed to understand why Pilsbry chose to substitute *Ambloxis* for the commonly used *Campeloma*. He observed (p. 276): 'The generic name *Campeloma* has been in general use for nearly one hundred years, while *Ambloxis* has never been used, other than casually mentioned as being possibly the same as *Campeloma*'. Baker (1964, pp. 166–167) catalogued a number of species, using *Ambloxis* as a 'preferred genus' which he used 'in a broad sense'. Clarke (1973, p. 216) and Vaught (1989, p. 17) tentatively listed *Ambloxis* as a synonym of *Campeloma*. *Campeloma* has been used extensively in molluscan literature (Gill, 1864; Call, 1883, 1886, 1888a, 1888b, 1894; Pilsbry, 1898; Baker, 1902; Pilsbry, 1917; van Cleave & Altringer, 1937; Hubricht, 1943; van der Schalie, 1964; Anderson, 1966; Vail, 1979a, 1979b; Karlin et al., 1980; Karlin, 1981; Kotrla & Dougherty, 1984). *Campeloma* appears as a genus in the standard nomenclators (Agassiz, 1842–1846, 1846; Herrmannsen, 1846; Scudder, 1882; Sherborn, 1924; Neave, 1939). *Campeloma* has been used exclusively in the studies of the gastropod faunas in North America (Baker, 1902; Hannibal, 1912; Baker, 1928; Goodrich & van der Schalie, 1944; Robertson & Blakeslee, 1948; Clench & Turner, 1956; Harman & Berg, 1971; Clarke, 1973; Wood, 1982; Thompson, 1984; Jokinen, 1983, 1992; Smith, 1991), and in systematic guides (Walker, 1918; Prashad, 1928; Thiele, 1931; La Rocque, 1953, 1968; Parodiz, 1956; Clench, 1959, 1962; Leonard, 1959; Starobogatov, 1970; Barnes, 1974; Burch, 1978, 1979, 1982a; Burch & Tottenham, 1980; Clarke, 1981; Boss, 1982; Turgeon et al., 1988; Vaught, 1989; Brown, 1991).

6. In order to avoid undesirable changes in nomenclature and to preserve the stability of generic names in the VIVIPARIDAE we propose that the generic name *Campeloma* Rafinesque, 1819 be conserved by suppression of *Ambloxis* Rafinesque, 1818.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary powers to suppress the name *Ambloxis* Rafinesque, 1818 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Campeloma* Rafinesque, 1819 (gender: neuter), type species by monotypy *Campeloma crassula* Rafinesque, 1819;
- (3) to place on the Official List of Specific Names in Zoology the name *crassula* Rafinesque, 1819, as published in the binomen *Campeloma crassula* (specific name of the type species of *Campeloma*);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Ambloxis* Rafinesque, 1818, as suppressed in (1) above.

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